

IN THE DRAWINGS

The attached sheet of drawings includes changes to Fig. 1. This sheet, which includes Fig. 1, replaces the original sheet including Fig. 1.

Attachment: Replacement Sheet

REMARKS/ARGUMENTS

Favorable reconsideration of this application is respectfully requested.

A substitute Figure 1 is presented herein in which each of elements 11, 12, 1n is now properly labeled. The submission of that substitute Figure 1 is believed to address the outstanding objection to the drawings noted in paragraph 1 of the Office Action.

The specification is amended by the present response to address the objection noted in paragraph 2 of the Office Action. The specification is also amended to provide a new Abstract believed to be in more proper format under United States practice.

Claims 21-39 are pending in this application. Claims 1-20 are canceled by the present response without prejudice and new Claims 21-39 are presented for examination. Claims 1-20 were objected to for informalities. Claims 1-3 were rejected under 35 U.S.C. §102(e) as anticipated by U.S. Patent Application Publication 2003/0007455 to Kohzuki et al. (herein "Kohzuki"). Claims 5-13, 15, and 17-19 were rejected under 35 U.S.C. §103(a) as unpatentable over U.S. patent 6,532,213 to Chiussi et al. (herein "Chiussi") in view of Kohzuki. Claims 4, 14, 16, and 20 were indicated as allowable if rewritten to overcome the rejections under 35 U.S.C. §112, second paragraph, and to include all of the limitations of their base claims and any intervening claims.

Initially, applicants gratefully acknowledge the indication of allowable subject matter in Claims 4, 14, 16, and 20.

Addressing first the objection to Claims 1-20, that objection is traversed by the present response. More particularly, Claims 1-20 are canceled by the present response and new Claims 21-39 are presented for examination. New Claims 21-39 correspond substantially in scope to respective previously pending Claims 2-20, but new Claims 21-39 have been written to recite clearer language. New Claims 21-39 are not believed to be more narrow in scope in any aspect in comparison with canceled respective Claims 2-20.

Addressing now the rejection of Claims 1-3 under 35 U.S.C. §102(e) as anticipated by Kohzuki, that rejection is traversed by the present response.

New independent Claims 21 and 22 correspond to previously pending Claims 2 and 3 rewritten in independent form, and applicants respectfully submit those claims patentably distinguish over the teachings in Kohzuki.

New independent Claim 21 requires that "the accuracy of the transfer time of the connections is set higher in stages at a time nearer to an actual transfer time of the connections". With such a structure recited in Claim 21 it is possible to perform shaping of large amounts of connections at a high degree of accuracy.

Kohzuki discloses a multi-stage traffic shaping method. Kohzuki describes in paragraph [0200] that shaping can be performed in a number of stages for shaping in which a VP shaping stage could be a last stage, i.e., is closest to an actual transfer time, and Kohzuki describes in paragraph [0201] that another stage can be added after the VP bandwidth stage. Such teachings in Kohzuki merely set forth that a plurality of shaping stages can be utilized.

Kohzuki, however, is silent as to the feature recited in new independent Claim 21 that the "accuracy of the transfer time of the connections is set *higher in stages at a time nearer to an actual transfer time* of the connections" (emphasis added). That is, Kohzuki does not disclose or suggest any operation of separately setting the accuracy of a transfer speed of connection in each stages, much less making a higher accuracy at stages at a time nearer to an actual transfer time of connections.

In such ways, applicants respectfully submit new independent claim 21 patentably distinguishes over Kohzuki.

With respect to new independent claim 23, that claim recites that the accuracy of the transfer time of the connections is set in n stages, and among the n stages, in a stage in which "the time accuracy is highest, the packets are managed in a transfer order, and in the other

stages, the packets are managed by being divided into standardized time slots". With such a structure recited in new independent claim 22, it is possible to set in stages the accuracy of transfer speed of connections. Kohzuki fails to teach or suggest such features.

Kohzuki discloses in paragraphs [0150] and [0151] sorting of packets according to which VP should be sent most recently. However, such a description in Kohzuki merely indicates the packets are sorted in accordance with the transfer order.

Kohzuki, however, does not teach or suggest that in the stage in which time accuracy is highest, the packets are managed in a transfer order, and in other stages, the packets are managed by being divided into standardized time slots. Kohzuki in fact does not disclose or suggest any packets being managed by being divided by standardized time slots in any stage.

In such ways, applicants respectfully submit new independent claim 22 also distinguishes over the teachings in Kohzuki.

Addressing now the rejection of Claims 5-13, 15, and 17-19 under 35 U.S.C. §103(a) as unpatentable over Chiussi in view of Kohzuki, that rejection is traversed by the present response.

New independent Claims 24 and 34, which correspond to previously pending independent Claims 5 and 15, and the claims dependent therefrom, are believed to clearly distinguish over Chiussi in view of Kohzuki.

Independent claims 24 and 34 recite "first holding means" for holding information relating to a theoretical transfer time by dividing held information into standardized time slots or at a standardized time unit, and require "second holding means" for holding information relating to a transfer order. Such features are believed to distinguish over the applied art.

Chiussi discloses a plurality of delay-class shapers 64, class queues 70 corresponding to respective delay-class shapers 64, and a sorter 76 for sorting data packets stored in the class queues 70 (see for example Fig. 7). In Chiussi individual delay times can be set in the

delay-class shapers 64. However, Chiussi does not disclose a relationship between the delay times and the delay-class shapers.

In independent claims 24 and 34 the "first holding means" holds information relating to a theoretical transfer time by dividing the held information into standardized time slots or of a standardized time unit. Chiussi neither discloses nor suggests that information is managed by being divided into standardized time slots or at a standardized time unit. By utilizing such a feature in the apparatus of independent claims 24 and 34, it is possible to set in n stages accuracy of transfer speed of connections. Chiussi cannot achieve such an advantage.

Further, in independent claims 24 and 34 the "second holding means" holds information relating to a transfer order. Chiussi neither discloses nor suggests holding information in such different standards.

Moreover, no teachings in Kohzuki can overcome the above-noted deficiencies in Chiussi with respect to the claimed first and second holding means.

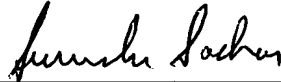
In such ways, applicants respectfully submit independent claims 24 and 34, and the claims dependent therefrom, distinguish over the combination of teachings of Chiussi in view of Kohzuki.

In view of these foregoing comments, applicants respectfully submit each of independent claims 21, 22, 24, and 34, and the claims dependent therefrom, patentably distinguish over the applied art.

As no other issues are pending in this application, it is respectfully submitted that the present application is now in condition for allowance, and it is hereby respectfully requested that this case be passed to issue.

Respectfully submitted,

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